

Notice of Allowability

Application No.

10/004,015

Examiner

Trent J. Roche

Applicant(s)

HUNDT ET AL.

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communications filed 13 December 2005.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ The drawings filed on 18 October 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

1. This Office Action is responsive to communications filed 13 December 2004.
2. Per applicant's request, newly added claims 13-20 have been entered. Claims 1-20 are now pending.
3. Claims 1-20 have been examined.

Response to Arguments

4. Applicant's arguments, see pages 8-12 of the Remarks, filed 13 December 2004, with respect to claims 1-12 have been fully considered and are persuasive. The rejection of claims 1-3, 6, 7 and 12 under 35 U.S.C. § 102(b) and the rejection of claims 4, 5 and 8-11 under 35 U.S.C. § 103(a) have been withdrawn.

Allowable Subject Matter & Examiner's Statement of Reason(s) for Allowance

5. Claims 1-20 are allowed.
6. The following is an examiner's statement of reasons for allowance:

The closest found prior art of record, specifically, U.S. Patent 5,822,787 to Zucker, taken alone or in combination, fails to teach or reasonably suggest a method for optimization of an executable program that calls procedures in a shared library in accordance with independent claim 1. Specifically, Zucker does not teach *identifying linkage code segments in the executable program...reading the address information from the linkage table; generating respective substitute code segments for the linkage code segments, each substitute code segment having references to the linkage table replaced by direct loads of the address information*

without reference to the linkage table; and executing the substitute code segments instead of the linkage code segments
(claim 1). Similar limitations are recited in independent claims 12, 13 and 17.

Instead, Zucker is directed to a method utilizing a dynamic linker for resolving and storing absolute addresses of functions in a procedure linkage table. Specifically, when a function which cannot be reached by relative branching is first called through the respective entry, the entry branches to the dynamic linker call section, which calls the dynamic linker to resolve and store the absolute address of the called function in the pointer table and alter the entry (of the PLT) to subsequently branch to the absolute address through the generic absolute branch instruction section. However, as noted on pages 8-9 of the applicant's Remarks, Zucker does not disclose the required limitation of generating respective substitute code segments for the linkage code segments, each substitute code segment having references to the linkage table replaced by direct loads of the address information without reference to the linkage table. In Zucker, the PLT entry is rather modified to provide a direct load address, however, the PLT is still utilized to call the required function.

Newly found prior art, specifically, U.S. Patent 6,665,671 to Coutant, taken alone or in combination, also fails to teach or reasonably suggest the required limitations of independent claims 1, 12, 13 and 17. While Coutant discloses in a shared data environment generating a linkage table for a computer program, determining a location of the unresolved data at load time of the computer program, and modifying the load instruction at load time of the computer program to directly load the unresolved data at the location, ultimately Coutant is directed to a concept different than that of the instant application; that of a system and method for optimizing and efficiently accessing remotely shared data, and does not deal with optimization issues regarding calling procedures in

shared libraries. As such, Coutant does not disclose at least identifying linkage code segments in the executable program, wherein each linkage code segment is associated with a call to a procedure in the shared library, reading procedure address information from a linkage table, and transferring control to an associated one of the procedures.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trent J. Roche whose telephone number is (571) 272-3733. The examiner can normally be reached on Monday - Friday, 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/004,015

Page 5

Art Unit: 2193

Trent J Roche
Examiner
Art Unit 2193

TJR



ANIL KHATRI
PRIMARY EXAMINER